STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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0005

February 22, 1984

(P492 430 071)
CERTIFIED RETURN RECEIPT REQUESTED

Mr. Wendell Owen
Co-op Mining Company
P. O. Box 1245
Huntington, Utah 84528

RE: Abatement Plan Review
NOV N83-5-8-3
Co-op Mining Bear Canyon Road
Bear Creek Canyon Mine
ACT/015/025, Folder Nos. 3 & 7
Emery County, Utah

Dear Mr. Owen:

The Division has completed the review of your August 8, 1983 submittal prepared in response to NOV N83-5-8-3 and to the August 25, 1983 Board Order pertaining to the Bear Canyon Mine access/haul road.

A number of deficiencies must be resolved before the submittal will be in compliance with the performance standards. At such time, the plans will receive the Division's approval.

The items to be addressed are as follows:

1. The agreement that was submitted to the Division between Emery County and Co-op Mining for the existing road (known as Bear Creek Road) was not signed. This agreement needs proper signatures.

2. UMC 771.23 Permit Application

(e)(1) A topographic map should be submitted showing the area at a scale of 1" = 2,000'.

3. UMC 784.24 Transportation Facilities

(a) Specifications for each road width, road gradient, road surface, road cut, fill embankment and culvert(s) must be given. The width of the road on the submitted map is not to scale. This must be indicated on the map.

4. UMC 817.152 Roads: Class I: Design and Construction

(9) The minimum safety factor for the embankments shall be 1.25. This must be verified.

5. UMC 817.153 Roads: Class I: Drainage

Is the culvert on the submitted drawing to scale?

Co-op Mining Company has incorporated a letter from Horrocks & Carollo Engineers containing recommendations for the drainage structures to be utilized on the haul road. The operator must make a written commitment to undertake these recommendations before approval can be given.

Assuming that the recommendations contained in the Horrocks & Carollo letter will be undertaken by the operator, the following deficiencies must be addressed:

(c)(1)(ii) How was the culvert installed to avoid plugging or collapse and erosion at inlets and outlets?

The applicant's proposal to use 18 inch culverts (with a peak headwater depth of 30 inches) under the road is not in conformance with UMC 817.153(c)(1). Culverts are required to safely pass the 10-year, 24-hour storm, without a head of water at the entrance. A variance may be granted for the existing 18 inch culvert provided that a minimum 30-inch headwater depth above the top of the culvert is demonstrated.

The proposal also lacks specifics for the type of headwall device(s) designed to protect the inlet end of the culvert(s). UMC 817.153(c)(2)(vi) requires a rock headwall or other material approved by the Division for inlet protection. This information must be supplied.

The two proposed culverts must be sized to pass the design event without a headwater depth greater than the culvert diameter (27- or 30-inch CMP appears adequate).

The drainage ditch along the road is proposed to be 1.5 feet deep. Allowing for 0.3 foot of freeboard with 1.2 feet of effective depth, The ditch is not adequate to pass a 10-year, 24-hour event. If a 1.8 foot actual depth was proposed, this would be adequate.

The velocity calculated in the ditch adjacent to the road is erosive (6.8 feet/second, based upon an average channel slope of six percent). No erosion protection measures are proposed. Erosion protection measures must be submitted by the operator for those channel sections with velocities exceeding 5.0 feet/second.

The erosive channel sections (velocity greater than 5.0 feet/second) must incorporate appropriate channel lining material. Adequately sized riprap material is one possible alternative. The use of a filter blanket may also be necessary unless soil erodibility conditions (i.e., particle size analysis) demonstrate otherwise.

(c)(2)(vi) Additionally, no information is provided on culvert outflow points. Erosion protection measures must be proposed for culvert outfall points.

6. UMC 817.154 Roads: Class I: Surfacing

(a) How will the roads be surfaced? Please state the type of surfacing proposed.

7. UMC 817.155 Roads: Class I: Maintenance

The road must be maintained in such a manner that the required performance standards will be met throughout the life of the entire transportation facility. This will include maintaining the surface, shoulders, parking and side areas and erosion control structures for safe and efficient utilization of the road.

8. UMC 817.156 Roads: Class I: Restoration

The submittal from Co-op stated that the final reclamation plan was previously submitted, and that it will be reclaimed unless it is determined to be necessary for postmining land-use. The reclamation plan must be included in this submittal for the road. This submittal (or specific reference to the appropriate sections and pages in the MRP) should include the entire mine and reclamation plan for the 1,800 feet of road, which includes the postmining land-use. How will the road be removed and how will the land affected be regraded and revegetated? This must be addressed.

Upon receipt of Co-op's response to the deficiencies outlined above, the Division will proceed with the review and approval process.

Should you have any questions, please contact me or D. Wayne Hedberg at your earliest convenience.

Sincerely,

James W. Smith, Jr.
Coordinator of Mined
Land Development

JWS/DWH:btb

cc: Allen D. Klein, OSM, Denver
Tom Ehmett, OSM, Albuquerque
D. Wayne Hedberg, DOGM
J. Whitehead, DOGM
P. Grubaugh-Littig, DOGM
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